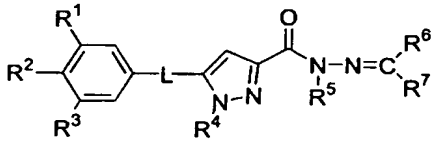
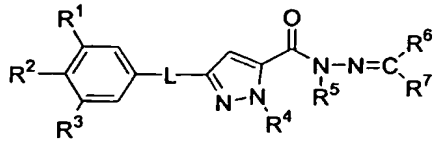
What is claimed is:

1. A method for treating an individual having or at risk of having a bacterial infection comprising:

administering to the individual a composition comprising a compound having the structure of formula 1a or 1b:



1a



1b

wherein R^1, R^2, and R^3 are each, independently, selected from the group consisting of hydrogen (H), substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl;

R^4 and R^5 are, independently, selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, and substituted or unsubstituted cycloalkyl; wherein when R^4 is H, two tautomeric forms depicted by structures 1a and 1b may exist;

R^6 and R^7 are, independently, selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted

alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted alkylaryl, and substituted or unsubstituted heteroaryl, or R^6 and R^7 are atoms that form part of a aromatic or non-aromatic, heterocylic or carbocyclic ring or ring system, comprising either a monocyclic ring or a fused ring system, having ring atoms selected from the group consisting of substituted or unsubstituted carbon, nitrogen or sulfur; and

L may be absent or selected from the group consisting of linkers having 1-6 atoms in contiguous linear connectivity; or

an enantiomeric or diastereomeric form or a pharmaceutically acceptable salt thereof.

2. The method according to Claim 1, wherein R^1, R^2 and R^3 are each, independently, selected from the group consisting of hydrogen (H), substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted C_{1-6} alkylamino, substituted or unsubstituted C_{1-6} alkylaminoalkyl, substituted or unsubstituted C_{1-6} alkoxy, substituted or unsubstituted C_{1-6} alkoxyalkyl, substituted or unsubstituted C_{1-6} alkylthio, substituted or unsubstituted C_{1-6} alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted C_{3-12} carbocyclyl, substituted or unsubstituted C_{3-12} carbocyclylalkyl, substituted or unsubstituted C_{3-12} carbocyclyloxy, substituted or unsubstituted C_{3-12} carbocyclyloxyalkyl, substituted or unsubstituted C_{3-12} carbocyclylamino, substituted or unsubstituted C_{3-12} carbocyclylaminoalkyl, substituted or unsubstituted 3-12 membered heterocyclyl, substituted or unsubstituted 3-12 membered heterocyclyl-C_1-C_6 alkyl, substituted or unsubstituted 3-12 membered heterocyclyloxy, substituted or unsubstituted 3-12 membered heterocyclyloxy-C_1-C_6-alkyl, substituted or unsubstituted 3-12 membered heterocyclylamino, and substituted or unsubstituted 3-12 membered heterocyclylamino-C_1-C_6-alkyl;

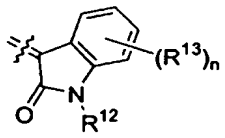
R^4 and R^5 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, and substituted or unsubstituted C_{3-8} cycloalkyl; wherein when R^4 is H, two tautomeric forms depicted by structures 1a and 1b may exist;

R^6 and R^7 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, substituted or unsubstituted C_{3-12} cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted C_{1-6} alkylaryl, and substituted or unsubstituted C_{4-12} heteroaryl, or R^6 and R^7 are atoms that form part of a aromatic or non-aromatic, heterocylic or carbocyclic ring or ring system, comprising either a 3-6 membered monocyclic ring or a 6-12 membered fused ring system, having ring atoms selected from the group consisting of substituted or unsubstituted carbon, nitrogen, and sulfur; and

L may be absent or selected from the group consisting of linkers having 1-6 atoms in contiguous linear connectivity.

3. The method according to Claim 2, wherein R^4 and R^5 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, and substituted or unsubstituted C_{3-8} cycloalkyl; wherein when R^4 is H, two tautomeric forms depicted by structures 1a and 1b may exist;

R^6 and R^7 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, substituted or unsubstituted C_{3-12} cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted C_{1-6} alkylaryl, and substituted or unsubstituted C_{4-12} heteroaryl, or R^6 and R^7 are atoms that form part of a ring system having the structure:



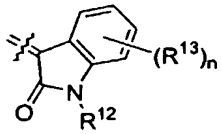
wherein R^{12} is selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, and substituted or unsubstituted C_{3-8} cycloalkyl,

each R^{13} is selected from the group consisting of substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl;

n is an integer selected from 0, 1, 2, 3, and 4; and

L may be absent or selected from the group consisting of linkers having 1-3 atoms in contiguous linear connectivity.

4. The method according to Claim 3, wherein R^4, R^5, and R^6 are H, and R^7 is phenyl optionally substituted by one or more of C_{1-6} alkyl, C_{1-6} alkoxy, halo, amino, hydroxy, and halo, or R^6 and R^7 are atoms that form part of a ring system having the structure:



wherein R^{12} is selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, and substituted or unsubstituted C_{3-8} cycloalkyl,

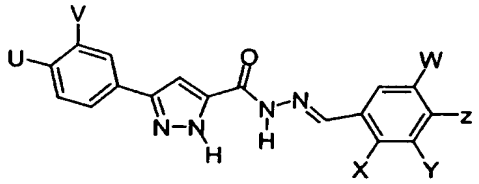
each R^{13} is selected from the group consisting of substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, halo, amino, substituted or unsubstituted C_{1-6} acyl, substituted or unsubstituted aryl, substituted

or unsubstituted C_{1-6} alkoxy, substituted or unsubstituted C_{1-6} alkoxyalkyl, nitro, hydroxyl, and cyano,

n is an integer selected from 0, 1, and 2; and

L is absent.

5. The method according to Claim 1, wherein the compound has the structure of formula 2:



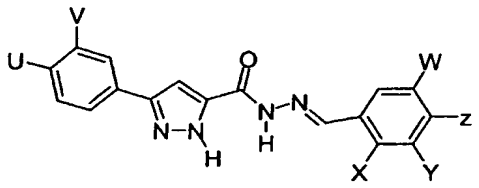
2

wherein U, V, W, X, Y and Z may be the same or different and are, independently, selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl;

or an enantiomeric or diastereomeric form or a pharmaceutically acceptable salt thereof.

6. The method according to Claim 5, wherein U, V, W, X, Y, and Z are, independently, selected from the group consisting of H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{1-4} alkoxy, halo, hydroxyl, and amino.

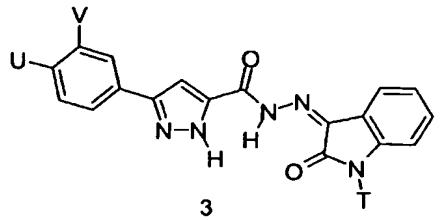
7. The method according to Claim 5, wherein the compound is selected from the group consisting of Compounds 1-19, having the structure indicated by formula 2 and the table below:



2

Compound Number	U	V	W	X	Y	Z
1	H	H	OCH_3	H	OCH_3	OCH_3
2	H	OCH_3	H	H	OCH_3	OCH_3
3	H	OCH_3	H	H	OCH_2CH_3	OH
4	H	H	H	OH	H	OH
5	H	H	H	H	OCH_3	OH
6	H	H	Br	OH	H	H
7	H	OCH_2CH_3	H	OH	OCH_3	H
8	CH_3	H	H	OH	OCH_3	H
9	H	H	H	OH	H	H
10	H	OCH_3	H	H	OH	H
11	H	H	H	H	H	CH_3
12	H	H	C_4H_9	H	C_4H_9	OH
13	OCH_3	H	H	H	H	H
14	H	OCH_3	H	H	H	OH
15	Cl	H	H	H	OCH_3	OCH_3
16	OCH_3	H	H	H	H	OH
17	OCH_3	H	OCH_3	H	OCH_3	OCH_3
18	OCH_3	H	H	H	OCH_3	OCH_3
19	OC_2H_5	H	H	H	OCH_3	OH

8. The method according to Claim 1, wherein the compound has the structure of formula 3:



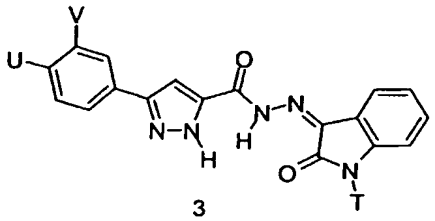
3

wherein, U and V may be the same or different and are, independently, selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl; and

T is selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, and substituted or unsubstituted cycloalkyl.

9. The method according to Claim 8, wherein U and V are independently selected from the group consisting of H, C_{1-4} alkyl, C_{1-4} alkoxy, and aryl, and T is selected from the group consisting of H and C_{1-4} alkyl.

10. The method according to Claim 8, wherein the compound is selected from the group consisting of Compounds 20 and 21, having the structure indicated by formula 3 and the table below:



3

Compound Number	T	U	V
20	C_2H_5	H	H
21	C_2H_5	H	C_6H_5

11. The method according to any of Claims 1-10, wherein the composition further comprises a pharmaceutically acceptable carrier.

12. The method according to Claim 11, wherein the composition further comprises an additional ingredient selected from the group consisting of another antibiotic, an antiviral compound, an anti-cancer compound, a vitamin, a trace metal supplement, an ion, and combinations thereof.

13. The method according to any of Claims 1-10, wherein the composition is administered to the individual parenterally or non-parenterally.

14. The method according to any of Claims 1-10, wherein the composition is administered to the individual through a route selected from the group consisting of intravenously, subcutaneously, intramuscularly, intraorbitally, ophthalmically, intraventricularly, intracranially, intracapsularly, intraspinally, intracisternally, intraperitoneally, intranasally, orally, buccally, rectally, vaginally, topically, and combinations thereof.

15. The method according to any of Claims 1-10, wherein the composition is administered to the individual by aerosol, by scarification, or by surgical implant.

16. The method according to any of Claims 1-10, wherein the bacterial infection is caused by Gram-positive bacteria or mycoplasma bacteria.

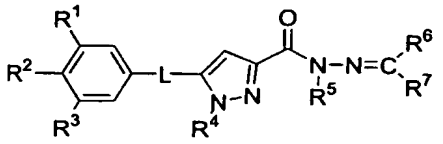
17. The method according to Claim 16, wherein the bacteria are Gram-positive bacteria.

18. The method according to Claim 17, wherein the Gram-positive bacteria are selected from the group consisting of *Streptococcus, Enterococcus, Staphylococcus, Bacillus, Clostridium, Listeria*, and combinations thereof.

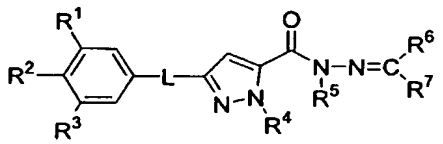
19. The method according to any of Claims 1-10, wherein the bacterial infection is caused by Gram-negative bacteria.

20. The method according to Claim 19, wherein the Gram-negative bacteria are selected from the group consisting of *Escherichia, Salmonella, Pseudomonas, Helicobacter, Legionella, Shigella, Yersinia, Neisseria*, and combinations thereof.

21. A method of inhibiting growth of bacteria comprising:
contacting the bacteria with a compound having a structure of formula 1a or 1b:



1a



1b

wherein R^1, R^2, and R^3 are each, independently, selected from the group consisting of hydrogen (H), substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or

unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl;

R^4 and R^5 are, independently, selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, and substituted or unsubstituted cycloalkyl; wherein when R^4 is H, two tautomeric forms depicted by structures 1a and 1b may exist;

R^6 and R^7 are, independently, selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted alkylaryl, and substituted or unsubstituted heteroaryl, or R^6 and R^7 are atoms that form part of a aromatic or non-aromatic, heterocylic or carbocyclic ring or ring system, comprising either a monocyclic ring or a fused ring system, having ring atoms selected from the group consisting of substituted or unsubstituted carbon, nitrogen, and sulfur; and

L may be absent or selected from the group consisting of linkers having 1-6 atoms in contiguous linear connectivity; or

an enantiomeric or diastereomeric form or a pharmaceutically acceptable salt thereof.

22. The method according to Claim 21, wherein R^1, R^2, and R^3 are each, independently, selected from the group consisting of hydrogen (H), substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted C_{1-6} alkylamino, substituted or unsubstituted C_{1-6} alkylaminoalkyl, substituted or unsubstituted C_{1-6} alkoxy, substituted or unsubstituted C_{1-6} alkoxyalkyl, substituted or unsubstituted C_{1-6} alkylthio, substituted or unsubstituted C_{1-6} alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted C_{3-12} carbocyclyl, substituted or unsubstituted C_{3-12} carbocyclylalkyl, substituted or

unsubstituted C_{3-12} carbocyclyloxy, substituted or unsubstituted C_{3-12} carbocyclyloxyalkyl, substituted or unsubstituted C_{3-12} carbocyclylamino, substituted or unsubstituted C_{3-12} carbocyclylaminoalkyl, substituted or unsubstituted 3-12 membered heterocyclyl, substituted or unsubstituted 3-12 membered heterocyclyl-C_1-C_6 alkyl, substituted or unsubstituted 3-12 membered heterocyclyloxy, substituted or unsubstituted 3-12 membered heterocyclyloxy-C_1-C_6-alkyl, substituted or unsubstituted 3-12 membered heterocyclylamino, and substituted or unsubstituted 3-12 membered heterocyclylamino-C_1-C_6-alkyl;

R^4 and R^5 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, and substituted or unsubstituted C_{3-8} cycloalkyl; wherein when R^4 is H, two tautomeric forms depicted by structures 1a and 1b may exist;

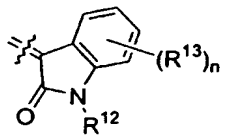
R^6 and R^7 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, substituted or unsubstituted C_{3-12} cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted C_{1-6} alkylaryl, and substituted or unsubstituted C_{4-12} heteroaryl, or R^6 and R^7 are atoms that form part of a aromatic or non-aromatic, heterocylic or carbocyclic ring or ring system, comprising either a 3-6 membered monocyclic ring or a 6-12 membered fused ring system, having ring atoms selected from the group consisting of substituted or unsubstituted carbon, nitrogen, and sulfur; and

L may be absent or selected from the group consisting of linkers having 1-6 atoms in contiguous linear connectivity.

23. The method according to Claim 22, wherein R^4 and R^5 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, and substituted or unsubstituted C_{3-8} cycloalkyl; wherein when R^4 is H, two tautomeric forms depicted by structures 1a and 1b may exist;

R^6 and R^7 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or

unsubstituted C_{2-6} alkynyl, substituted or unsubstituted C_{3-12} cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted C_{1-6} alkylaryl, and substituted or unsubstituted C_{4-12} heteroaryl, or R^6 and R^7 are atoms that form part of a ring system having the structure:



wherein R^{12} is selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, and substituted or unsubstituted C_{3-8} cycloalkyl,

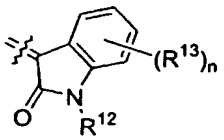
each R^{13} is selected from the group consisting of substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl;

n is an integer selected from 0, 1, 2, 3, and 4; and

L may be absent or selected from the group consisting of linkers having 1-3 atoms in contiguous linear connectivity.

24. The method according to Claim 23, wherein R^4, R^5, and R^6 are H, and R^7 is phenyl optionally substituted by one or more of C_{1-6} alkyl, C_{1-6} alkoxy, halo, amino,

hydroxy, and halo, or R^6 and R^7 are atoms that form part of a ring system having the structure:



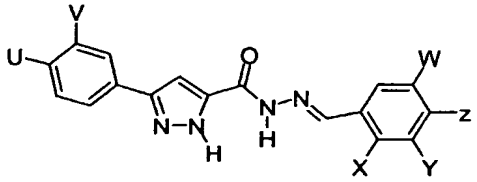
wherein R^{12} is selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, and substituted or unsubstituted C_{3-8} cycloalkyl,

each R^{13} is selected from the group consisting of substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, halo, amino, substituted or unsubstituted C_{1-6} acyl, substituted or unsubstituted aryl, substituted or unsubstituted C_{1-6} alkoxy, substituted or unsubstituted C_{1-6} alkoxyalkyl, nitro, hydroxyl, and cyano,

n is an integer selected from 0, 1, and 2; and

L is absent.

25. The method according to Claim 21, wherein the compound has the structure of formula 2:



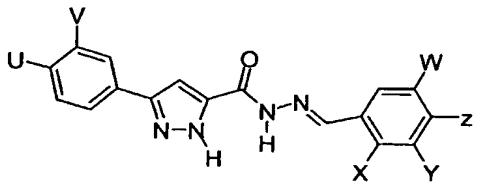
2

wherein U, V, W, X, Y, and Z may be the same or different and are independently selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or

unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl;
or an enantiomeric or diastereomeric form or a pharmaceutically acceptable salt thereof.

26. The method according to Claim 25, wherein U, V, W, X, Y, and Z are independently selected from the group consisting of H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{1-4} alkoxy, halo, hydroxyl, and amino.

27. The method according to Claim 25, wherein the compound is selected from the group consisting of Compounds 1-19, having the structure indicated by formula 2 and the table below:

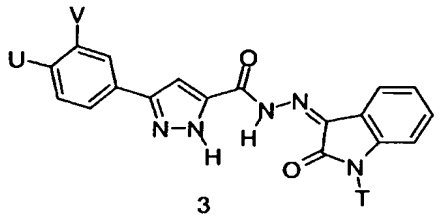


2

Compound Number	U	V	W	X	Y	Z
1	H	H	OCH_3	H	OCH_3	OCH_3
2	H	OCH_3	H	H	OCH_3	OCH_3
3	H	OCH_3	H	H	OCH_2CH_3	OH
4	H	H	H	OH	H	OH
5	H	H	H	H	OCH_3	OH
6	H	H	Br	OH	H	H
7	H	OCH_2CH_3	H	OH	OCH_3	H
8	CH_3	H	H	OH	OCH_3	H
9	H	H	H	OH	H	H
10	H	OCH_3	H	H	OH	H
11	H	H	H	H	H	CH_3

12	H	H	C_4H_9	H	C_4H_9	OH
13	OCH_3	H	H	H	H	H
14	H	OCH_3	H	H	H	OH
15	Cl	H	H	H	OCH_3	OCH_3
16	OCH_3	H	H	H	H	OH
17	OCH_3	H	OCH_3	H	OCH_3	OCH_3
18	OCH_3	H	H	H	OCH_3	OCH_3
19	OC_2H_5	H	H	H	OCH_3	OH

28. The method according to Claim 21, wherein the compound has the structure of formula 3:



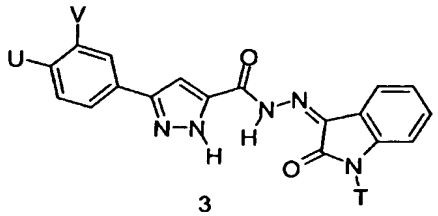
3

wherein, U and V may be the same or different and are independently selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl; and

T is selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, and substituted or unsubstituted cycloalkyl.

29. The method according to Claim 28, wherein U and V are independently selected from the group consisting of H, C_{1-4} alkyl, C_{1-4} alkoxy, and aryl, and T is selected from the group consisting of H and C_{1-4} alkyl.

30. The method according to Claim 28, wherein the compound is selected from the group consisting of Compounds 20 and 21, having the structure indicated by formula 3 and the table below:



3

Compound Number	T	U	V
20	C_2H_5	H	H
21	C_2H_5	H	C_6H_5

31. The method according to any of Claims 21-30, wherein the bacteria are Gram-positive bacteria or mycoplasma bacteria.

32. The method according to Claim 31, wherein the bacteria are Gram-positive bacteria.

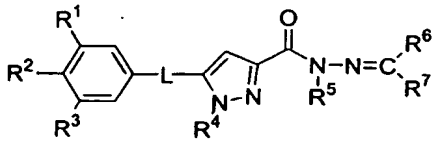
33. The method according to Claim 32, wherein the Gram-positive bacteria are selected from the group consisting of *Streptococcus, Enterococcus, Staphylococcus, Bacillus, Clostridium, Listeria*, and combinations thereof.

34. The method according to any of Claims 21-30, wherein the bacteria are Gram-negative bacteria.

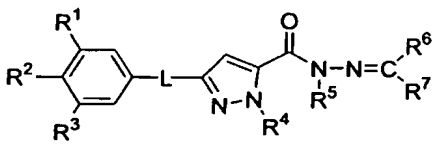
35. The method according to Claim 34, wherein the Gram-negative bacteria are selected from the group consisting of *Escherichia, Salmonella, Pseudomonas, Helicobacter, Legionella, Shigella, Yersinia, Neisseria*, and combinations thereof.

36. A method of inhibiting the activity of a DNA polymerase III comprising:

contacting the DNA polymerase III with a compound having a structure of formula 1a or 1b:



1a



1b

wherein R^1, R^2, and R^3 are each, independently, selected from the group consisting of hydrogen (H), substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl;

R^4 and R^5 are, independently, selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, and substituted or unsubstituted cycloalkyl; wherein when R^4 is H, two tautomeric forms depicted by structures 1a and 1b may exist;

R^6 and R^7 are, independently, selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted alkylaryl, and substituted or unsubstituted heteroaryl, or R^6 and R^7 are atoms that form part of a aromatic or non-aromatic, heterocylic or carbocyclic ring or ring system, comprising either a monocyclic ring or a fused ring system, having ring atoms selected from the group consisting of substituted or unsubstituted carbon, nitrogen, and sulfur; and

L may be absent or selected from the group consisting of linkers having 1-6 atoms in contiguous linear connectivity; or
an enantiomeric or diastereomeric form or a pharmaceutically acceptable salt thereof.

37. The method according to Claim 36, wherein R^1, R^2, and R^3 are each, independently, selected from the group consisting of hydrogen (H), substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted C_{1-6} alkylamino, substituted or unsubstituted C_{1-6} alkylaminoalkyl, substituted or unsubstituted C_{1-6} alkoxy, substituted or unsubstituted C_{1-6} alkoxyalkyl, substituted or unsubstituted C_{1-6} alkylthio, substituted or unsubstituted C_{1-6} alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted C_{3-12} carbocyclyl, substituted or unsubstituted C_{3-12} carbocyclylalkyl, substituted or unsubstituted C_{3-12} carbocyclyloxy, substituted or unsubstituted C_{3-12} carbocyclyloxyalkyl, substituted or unsubstituted C_{3-12} carbocyclylamino, substituted or unsubstituted C_{3-12} carbocyclylaminoalkyl, substituted or unsubstituted 3-12 membered heterocyclyl, substituted or unsubstituted 3-12 membered heterocyclyl-C_1-C_6 alkyl, substituted or unsubstituted 3-12 membered heterocyclyloxy, substituted or unsubstituted 3-12 membered heterocyclyloxy-C_1-C_6-alkyl, substituted or unsubstituted 3-12 membered heterocyclylamino, and substituted or unsubstituted 3-12 membered heterocyclylamino-C_1-C_6-alkyl;

R^4 and R^5 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or

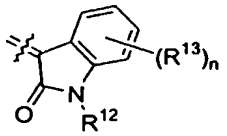
unsubstituted C_{2-6} alkynyl, and substituted or unsubstituted C_{3-8} cycloalkyl; wherein when R^4 is H, two tautomeric forms depicted by structures 1a and 1b may exist;

R^6 and R^7 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, substituted or unsubstituted C_{3-12} cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted C_{1-6} alkylaryl, and substituted or unsubstituted C_{4-12} heteroaryl, or R^6 and R^7 are atoms that form part of a aromatic or non-aromatic, heterocylic or carbocyclic ring or ring system, comprising either a 3-6 membered monocyclic ring or a 6-12 membered fused ring system, having ring atoms selected from the group consisting of substituted or unsubstituted carbon, nitrogen, and sulfur; and

L may be absent or selected from the group consisting of linkers having 1-6 atoms in contiguous linear connectivity.

38. The method according to Claim 37, wherein R^4 and R^5 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, and substituted or unsubstituted C_{3-8} cycloalkyl; wherein when R^4 is H, two tautomeric forms depicted by structures 1a and 1b may exist;

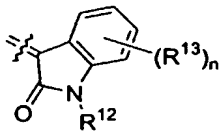
R^6 and R^7 are, independently, selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, substituted or unsubstituted C_{3-12} cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted C_{1-6} alkylaryl, and substituted or unsubstituted C_{4-12} heteroaryl, or R^6 and R^7 are atoms that form part of a ring system having the structure:



wherein R^{12} is selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, and substituted or unsubstituted C_{3-8} cycloalkyl,

each R^{13} is selected from the group consisting of substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl;
n is an integer selected from 0, 1, 2, 3, and 4; and
L may be absent or selected from the group consisting of linkers having 1-3 atoms in contiguous linear connectivity.

39. The method according to Claim 38, wherein R^4, R^5, and R^6 are H, and R^7 is phenyl optionally substituted by one or more of C_{1-6} alkyl, C_{1-6} alkoxy, halo, amino, hydroxy, and halo, or R^6 and R^7 are atoms that form part of a ring system having the structure:



wherein R^{12} is selected from the group consisting of H, substituted or unsubstituted C_{1-6} alkyl, and substituted or unsubstituted C_{3-8} cycloalkyl,

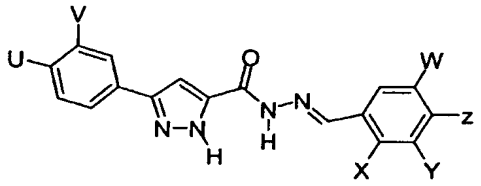
each R^{13} is selected from the group consisting of substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{2-6} alkenyl, substituted or unsubstituted C_{2-6} alkynyl, halo, amino, substituted or unsubstituted C_{1-6} acyl, substituted or unsubstituted aryl, substituted

or unsubstituted C_{1-6} alkoxy, substituted or unsubstituted C_{1-6} alkoxyalkyl, nitro, hydroxyl, and cyano,

n is an integer selected from 0, 1, and 2; and

L is absent.

40. The method according to Claim 36, wherein the compound has the structure of formula 2:



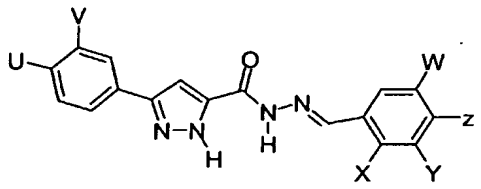
2

wherein U, V, W, X, Y, and Z may be the same or different and are independently selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl;

or an enantiomeric or diastereomeric form or a pharmaceutically acceptable salt thereof.

41. The method according to Claim 40, wherein U, V, W, X, Y, and Z are independently selected from the group consisting of H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{1-4} alkoxy, halo, hydroxyl, and amino.

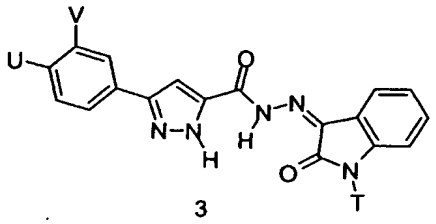
42. The method according to Claim 40, wherein the compound is selected from the group consisting of Compounds 1-19, having the structure indicated by formula 2 and the table below:



2

Compound Number	U	V	W	X	Y	Z
1	H	H	OCH_3	H	OCH_3	OCH_3
2	H	OCH_3	H	H	OCH_3	OCH_3
3	H	OCH_3	H	H	OCH_2CH_3	OH
4	H	H	H	OH	H	OH
5	H	H	H	H	OCH_3	OH
6	H	H	Br	OH	H	H
7	H	OCH_2CH_3	H	OH	OCH_3	H
8	CH_3	H	H	OH	OCH_3	H
9	H	H	H	OH	H	H
10	H	OCH_3	H	H	OH	H
11	H	H	H	H	H	CH_3
12	H	H	C_4H_9	H	C_4H_9	OH
13	OCH_3	H	H	H	H	H
14	H	OCH_3	H	H	H	OH
15	Cl	H	H	H	OCH_3	OCH_3
16	OCH_3	H	H	H	H	OH
17	OCH_3	H	OCH_3	H	OCH_3	OCH_3
18	OCH_3	H	H	H	OCH_3	OCH_3
19	OC_2H_5	H	H	H	OCH_3	OH

43. The method according to Claim 36, wherein the compound has the structure of formula 3:



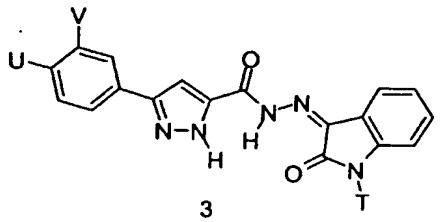
3

wherein, U and V may be the same or different and are independently selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, halo, amino, substituted or unsubstituted acyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylamino, substituted or unsubstituted alkylaminoalkyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkoxyalkyl, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylthioalkyl, nitro, hydroxyl, cyano, substituted or unsubstituted carbocyclyl, substituted or unsubstituted carbocyclylalkyl, substituted or unsubstituted carbocyclyloxy, substituted or unsubstituted carbocyclyloxyalkyl, substituted or unsubstituted carbocyclylamino, substituted or unsubstituted carbocyclylaminoalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, substituted or unsubstituted membered heterocyclyloxy, substituted or unsubstituted heterocyclyloxyalkyl, substituted or unsubstituted heterocyclylamino, and substituted or unsubstituted heterocyclylaminoalkyl; and

T is selected from the group consisting of H, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, and substituted or unsubstituted cycloalkyl.

44. The method according to Claim 43, wherein U and V are independently selected from the group consisting of H, C_{1-4} alkyl, C_{1-4} alkoxy, and aryl, and T is selected from the group consisting of H and C_{1-4} alkyl.

45. The method according to Claim 43, wherein the compound is selected from the group consisting of Compounds 20 and 21, having the structure indicated by formula 3 and the table below:



3

Compound Number	T	U	V
20	C_2H_5	H	H
21	C_2H_5	H	C_6H_5

46. The method according to any of Claims 36-45, wherein the DNA polymerase III is a pol IIIC class or a pol IIIE class enzyme.

47. The method according to Claims 36-45, wherein the DNA polymerase III is from Gram-positive bacteria or mycoplasma bacteria.

48. The method according to Claim 47, wherein the bacterial DNA polymerase III is from Gram-positive bacteria.

49. The method according to Claim 48, wherein the Gram-positive bacteria are selected from the group consisting of *Streptococcus, Enterococcus, Staphylococcus, Bacillus, Clostridium, Listeria*, and combinations thereof.

50. The method according to Claim 46, wherein the DNA polymerase III is a pol IIIE class enzyme.

51. The method according to Claim 50, wherein the pol IIIE class enzyme is from Gram-negative bacteria.

52. The method according to Claim 49, wherein the Gram-negative bacteria are selected from the group consisting of *Escherichia, Salmonella, Pseudomonas, Helicobacter, Legionella, Shigella, Yersinia, Neisseria*, and combinations thereof.

53. Use of a pyrazole carboxylic acid hydrazide compound to treat or prevent a bacterial infection.

54. Use of a pyrazole carboxylic acid hydrazide compound in the manufacture of a medicament to treat or prevent a bacterial infection.

55. A pharmaceutical composition for the treatment or prevention of a bacterial infection comprising an amount of a pyrazole carboxylic acid hydrazide effective to inhibit bacterial growth and a pharmaceutically acceptable carrier.